



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,901	12/30/2003	Bo-Nam Lee	678-1135 (P10778)	7430

28249 7590 02/08/2007
DILWORTH & BARRESE, LLP
333 EARLE OVINGTON BLVD.
SUITE 702
UNIONDALE, NY 11553

EXAMINER

PHAM, TUAN

ART UNIT	PAPER NUMBER
----------	--------------

2618

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/748,901	Applicant(s) LEE, BO-NAM	
	Examiner TUAN A. PHAM	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 5, 7-10, 12, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamadera et al. (Pub. No.: US 2003/0064757, hereinafter, "Yamadera") in view of Lee (U.S. Patent No.: 6,434,484).

Regarding claim 1, Yamadera teaches a method for displaying reception sensitivity on a display screen of a multi-functional mobile terminal with at least two communication functions, comprising the steps of (see figures 5A-5E, 6A-6D, cellular mode and GPS mode):

a) checking a reception sensitivity of a reception signal for a prescribed communication function among the communication functions (see figures 5A-5D, checking RF signal receive at the mobile), and displaying a reception sensitivity indicator for indicating the reception sensitivity of the prescribed communication function

Art Unit: 2618

on the display screen (see figures 5A-5D, third display area display the level of radio wave reception, [0046, 0057]); and

b) if an operation mode of a communication function other than the prescribed communication function is enabled (see figures 6A-6D, the user want to use the GPS function, [0056-0057, 0067-0068]), checking reception sensitivity of a reception signal for the communication function corresponding to the enabled operation mode (see figures 6A-6D, the user want to use the GPS function, the mobile will check and display the GPS signals on the display area 19, [0056-0057, 0067-0068]), and displaying a reception sensitivity indicator for indicating the reception sensitivity of the communication function corresponding to the enabled operation mode on the display Screen (see figure 6D, third display area 19 display the reception signal for GPS, [0056-0057, 0067-0068]).

It should be noticed that Yamadera fails to teach function corresponding to the enabled operation mode, instead of displaying the reception sensitivity indicator of the prescribed communication function, wherein the reception sensitivity indicator corresponding to the enabled operation mode has a different form from the reception sensitivity indicator of the prescribed communication function, on the display screen. However, Lee teaches such features (see figure 4, display the satellite and signal strength different from display of Yamadera).

Therefore, it would have been obvious to one of ordinary skill in the art at the

Art Unit: 2618

time the invention was made to incorporate the teaching of Lee into view of Yamadera in order to show the user to recognize which function is currently supporting of the device.

Regarding claim 2, Yamadera further teaches if the enabled operation mode is terminated, returning to the step (a) of displaying the reception sensitivity indicator of the prescribed communication function (see [0067-0068]).

Regarding claim 3, Yamadera teaches a method for displaying reception sensitivity on a display screen of a multi-functional mobile terminal having a mobile communication function for establishing mobile communication over a mobile telecommunication network and a GPS (Global Positioning System) reception function for receiving a GPS signal from a GPS satellite (see figures 5A-5E, 6A-6D, cellular mode and GPS mode), comprising the steps of:

a) checking a reception sensitivity of a signal received from the mobile telecommunication network (see figures 5A-5D, checking RF signal receive at the mobile), and displaying a mobile communication reception sensitivity indicator for indicating a mobile communication reception sensitivity on the display screen (see figures 5A-5D, third display area display the level of radio wave reception, [0046, 0057]); and

b) if a GPS mode is enabled (see figures 6A-6D, the user want to use the GPS function, [0056-0057, 0067-0068]), checking a reception sensitivity of the GPS signal (see figures 6A-6D, the user want to use the GPS function, the mobile will check and display the GPS signals on the display area 19, [0056-0057, 0067-0068]), and

Art Unit: 2618

displaying a GPS reception sensitivity indicator for indicating the GPS reception sensitivity on the display screen (see figure 6D, third display area 19 display the reception signal for GPS, [0056-0057, 0067-0068]).

It should be noticed that Yamadera fails to teach instead of displaying the mobile communication reception sensitivity indicator, wherein the GPS reception sensitivity indicator has a different form from the mobile communication reception sensitivity indicator, on the display screen. However, Lee teaches such features (see figure 4, display the satellite and signal strength different from display of Yamadera).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Lee into view of Yamadera in order to show the user to recognize which function is currently supporting of the device.

Regarding claims 5 and 12, Lee further teaches the GPS reception sensitivity indicator displays a reception sensitivity level corresponding to a number of GPS satellites found by the GPS signal (see figure 4).

Regarding claim 7, Yamadera teaches a method for displaying reception sensitivity on a display screen of a multi-functional mobile terminal with at least two communication functions, comprising the steps of (see figures 5A-5E, 6A-6D, cellular mode and GPS mode):

a) checking a reception sensitivity of a reception signal for a prescribed communication function among the communication functions (see figures 5A-5D, checking RF signal receive at the mobile), and displaying a reception sensitivity

Art Unit: 2618

indicator for indicating the reception sensitivity of the prescribed communication function on the display screen (see figures 5A-5D, third display area display the level of radio wave reception, [0046, 0057]); and

b) upon receiving a user request to change the reception sensitivity indicator (see figures 6A-6D, the user want to use the GPS function, [0056-0057, 0067-0068]), checking a reception sensitivity of a reception signal for a communication function other than the prescribed communication function among the communication functions (see figures 6A-6D, the user want to use the GPS function, the mobile will check and display the GPS signals on the display area 19, [0056-0057, 0067-0068]), and displaying a reception sensitivity indicator for indicating the reception sensitivity of the other communication function on the display screen (see figure 6D, third display area 19 display the reception signal for GPS, [0056-0057, 0067-0068]).

It should be noticed that Yamadera fails to teach function corresponding to the enabled operation mode, instead of displaying the reception sensitivity indicator of the prescribed communication function, wherein the reception sensitivity indicator corresponding to the enabled operation mode has a different form from the reception sensitivity indicator of the prescribed communication function, on the display screen. However, Lee teaches such features (see figure 4, display the satellite and signal strength different from display of Yamadera).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to incorporate the teaching of Lee into view of Yamadera in order to show the user to recognize which function is currently supporting of the device.

Regarding claim 8, Yamadera further teaches returning to the step (a) of displaying the reception sensitivity indicator of the prescribed communication function when a predetermined time has elapsed after the reception sensitivity indicator of the other communication function has been displayed (see [0067-0068], it will take a second when the user press the end key 8 to return to the standby mode).

Regarding claim 9, Yamadera further teaches a user request to change the reception sensitivity indicator of the other communication function while displaying the reception sensitivity indicator of the other communication function, returning to the step (a) of displaying the reception sensitivity indicator of the prescribed communication function (see [0067-0068], figures 5A-5D, 6A-6D).

Regarding claim 10, Yamadera teaches a method for displaying reception sensitivity on a display screen of a multi-functional mobile terminal having a mobile communication function for establishing mobile communication over a mobile telecommunication network and a GPS (Global Positioning System) reception function for receiving a GPS signal from a GPS satellite (see figures 5A-5E, 6A-6D, cellular mode and GPS mode), comprising the steps of:

a) checking a reception sensitivity of a signal received from the mobile telecommunication network (see figures 5A-5D, checking RF signal receive at the mobile), and displaying a mobile communication reception sensitivity indicator for

Art Unit: 2618

indicating a mobile communication reception sensitivity on the display screen (see figures 5A-5D, third display area display the level of radio wave reception, [0046, 0057]); and

b) upon receiving a user request to change the reception sensitivity indicator while displaying the mobile communication reception sensitivity indicator (see figures 6A-6D, the user want to use the GPS function, [0056-0057, 0067-0068]), checking reception sensitivity of the GPS signal (see figures 6A-6D, the user want to use the GPS function, the mobile will check and display the GPS signals on the display area 19, [0056-0057, 0067-0068]), and displaying a GPS a reception sensitivity indicator for indicating the GPS reception sensitivity on the display screen (see figure 6D, third display area 19 display the reception signal for GPS, [0056-0057, 0067-0068]).

It should be noticed that Yamadera fails to teach instead of displaying the mobile communication reception sensitivity indicator, wherein the GPS reception sensitivity indicator has a different form from the mobile communication reception sensitivity indicator, on the display screen. However, Lee teaches such features (see figure 4, display the satellite and signal strength different from display of Yamadera).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Lee into view of Yamadera in order to show the user to recognize which function is currently supporting of the device.

Regarding claim 14, Yamadera further teaches returning to the step (a) of displaying the reception sensitivity indicator of the prescribed communication function

when a predetermined time has elapsed after the reception sensitivity indicator of the other communication function has been displayed (see [0067-0068], it will take a second when the user press the end key 8 to return to the standby mode).

4. Claims 4, 6, 11, 13, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamadera et al. (Pub. No.: US 2003/0064757, hereinafter, "Yamadera") in view of Lee (U.S. Patent No.: 6,434,484) as applied to claim 3 above, and further in view of Chihara et al. (Pub. No.: US 2002/0068600, hereinafter, "Chihara").

Regarding claims 4 and 11, Yamadera and Lee, in combination, fails teach the multi-functional mobile terminal further having a Bluetooth communication function for executing Bluetooth communication, further comprises the steps of: if a Bluetooth mode is enabled, checking a reception sensitivity of a reception signal for the Bluetooth communication, and displaying a Bluetooth reception sensitivity indicator for indicating the Bluetooth reception sensitivity. However, Chihara teaches such features (see figure 15, [0130]). Furthermore, Chihara does not show display the Bluetooth reception sensitivity indicator has a different form from the mobile communication reception sensitivity indicator. It appear to examiner that changing the form of the Bluetooth for displaying on LCD would depend more upon the choice of the manufacturer and the choice of engineering, than on any inventive concept. One skill in the art should recognize that Yamadera and lee has disclosed the different form of displaying on the LCD. Therefore, displaying with Bluetooth form is obvious to do so.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Chihara into view of Yamadera and Lee in order to show the user to recognize which function is currently supporting of the device.

Regarding claim 6, after combine, Yamadera further teaches returning to the step (a) of displaying the mobile communication reception sensitivity indicator after the GPS mode has been terminated; and returning to the step (a) of displaying the mobile communication reception sensitivity indicator after the Bluetooth mode has been terminated (see [0067-0068], it will take a second when the user press the end key 8 to return to the standby mode), Chihara teaches Bluetooth mode ([0013]).

Regarding claim 13, after combine, Yamadera further teaches returning to the step (a) of displaying the reception sensitivity indicator of the prescribed communication function when a predetermined time has elapsed after the reception sensitivity indicator of the other communication function has been displayed (see [0067-0068], it will take a second when the user press the end key 8 to return to the standby mode), Chihara teaches Bluetooth mode ([0013]).

Regarding claim 15, after combine, Yamadera further teaches upon receiving a user request to change the reception sensitivity indicator while displaying the GPS reception sensitivity indicator, returning to the step (a) of displaying the mobile communication reception sensitivity indicator (see [0067-0068], it will take a second when the user press the end key 8 to return to the standby mode), Chihara teaches Bluetooth mode ([0013]).

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

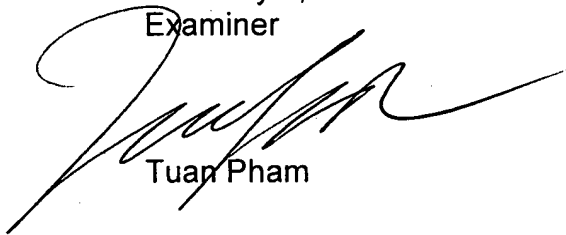
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A. Pham whose telephone number is (571) 272-8097. The examiner can normally be reached on Monday through Friday, 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Anderson can be reached on (571) 272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2618

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit 2618
February 3, 2007
Examiner

A handwritten signature in black ink, appearing to read 'Tuan Pham', written over the printed name.

Tuan Pham

Supervisory Patent Examiner
Technology Center 2600

A handwritten signature in black ink, appearing to read 'Matthew Anderson', written over the printed name.

Matthew Anderson